

CLAIMS

1. A spring member (70) for disc-brake calipers, suitable for being mounted in a disc-brake caliper (4),
5 the caliper (4) being suitable for being arranged, in a fitted configuration, astride a brake disc rotatable about an axis defining an axial direction (X), said caliper (4) comprising a space (32) for housing at least one pad (16) which extends predominantly in a tangential
10 direction (Y) parallel to a braking band of the brake disc and perpendicular to the axial direction (X), the spring member (70) being interposed between a lateral edge (64) of a pad (16) and reaction surfaces (42) of the caliper (4) so as to act resiliently on the pad
15 (16), the spring member (70) comprising a 'U'-shaped portion (80) suitable for forming a connection with a protuberance (48) of the reaction surfaces (42) which projects in the tangential direction (Y) into the housing space (32), a first resilient portion (96) which
20 extends substantially in a radial direction (Z) perpendicular to the axial and tangential directions (X, Y), is suitable for acting on the pad (16) in a tangential direction (Y), and is operatively connected to the 'U'-shaped portion (80), and a second resilient
25 portion (100) which extends substantially in the

tangential direction (Y), is operatively connected to the first resilient portion (96), and is suitable for acting on the pad (16) in a radial direction (Z), wherein the first resilient portion (96) is inclined in a manner such that a first connection end (97) of the first resilient portion (96), connected to the 'U'-shaped portion (80), is in contact with the reaction shoulders (44) and a second connection end (98), connected to the second resilient portion (100), is arranged, in the tangential direction (Y), further towards the interior of the housing space (32) than the first connection end (97), the first and second resilient portions (96, 100) being a single body projecting from the first connection end (97) of the first resilient portion (96) so that, when the spring member (70) and the respective pad (16) are in a fitted configuration in the housing space (32) of the caliper, the pad (16) is acted on resiliently by the spring member (70) both in a radial direction (Z) and in a tangential direction (Y), whether or not a braking force is being applied.

2. A spring member according to Claim 1 in which the first resilient portion (96) is substantially straight.

25 3. A spring member according to Claim 1 or Claim 2

in which the spring member (70) comprises two limbs (76) and a connecting arm (78) between the limbs so that, when the spring member (70) is in a fitted configuration on the caliper (4), each limb (76) can act resiliently on a respective pad (16), the pads being arranged
5 opposite one another in the axial direction (X).

4. A spring member according to any one of the preceding claims in which the spring member (70) can be mounted astride the brake disc on reaction surfaces (42)
10 of the caliper (4) and can cooperate resiliently with lateral edges (64) of a pair of pads (16) arranged on opposite sides of the brake disc."

5. A spring member according to any one of the preceding claims in which the 'U'-shaped portion (80)
15 has a substantially trapezoidal shape and can form a snap-coupling with the protuberance (48) of the reaction surfaces (42).

6. A spring member according to any one of Claims 3 to 5 in which each limb (76) comprises, in the region of
20 a portion attached to the connecting arm (78), a notch (88) which can separate the connecting arm (78) from the first section (82) of the 'U'-shaped portion (80) so as to permit resilient relative bending between the connecting arm (78) and the first section (82) of each
25 limb (76).

7. A spring member according to any one of Claims 3 to 6 in which the connecting arm (78) comprises two fingers (92) disposed at axially opposite ends and suitable for being inserted in corresponding recesses
5 (52) of the caliper so as to permit the location and/or clamping of the spring member (70) in the axial direction (X).

8. A spring member according to any one of Claims 3 to 7 in which the connecting arm (78) comprises a thrust
10 portion (90) which can come into abutment with a surface of the respective arch (40) which faces towards the seat (28) for the compatible brake disc.

9. A spring member according to any one of the preceding claims in which the spring member comprises
15 lead-in tabs (112) which are arranged substantially axially and are suitable for constituting a lead-in for the axial insertion of the pads in the respective housing spaces.

10. A disc-brake caliper comprising reaction
20 surfaces (42) suitable for cooperating with a spring member according to any one of the preceding claims.

11. A disc-brake caliper comprising at least one spring member according to any one of Claims 1 to 9.

12. A disc brake comprising at least one spring
25 member according to any one of Claims 1 to 9.